IN THE CLAIMS:

Please amend the claims as follows:

1. **(Currently Amended)** A mechanism including a shaft and a hub for transmitting torque between **[[**a**]]** the shaft and **[[**a**]]** the hub, comprising:

a shaft tooth section formed on the shaft;

a hub tooth section formed on the hub,

wherein the hub is disposed around the shaft while holding **[[**a**]]** the shaft tooth section ~~formed on the shaft~~ and **[[**a**]]** the hub tooth section ~~formed on the hub~~ in engagement with each other, wherein

said shaft tooth section has a crowned peak having a varying tooth thickness along an axial length of the crowned peak and a valley having an outside diameter varying from an end ~~thereof~~ of the shaft toward a shaft shank of the shaft; and

said hub tooth section has a straight peak opposing and engaging said valley of said shaft tooth section, said peak of said hub tooth section having a constant tooth thickness along an axial length and having an inside diameter varying from **[[**an**]]** the end of the shaft ~~thereof~~ toward said shaft shank, and a valley having a constant inside diameter in ~~the~~ an axial direction of the shaft.

2. **(Previously Presented)** A mechanism according to claim 1, wherein a changing point of the outside diameter of the valley of said shaft tooth section and a changing point of the inside diameter of the peak of said hub tooth section are set in respective positions which are offset from each other in the axial direction of the shaft.

3. **(Currently Amended)** A mechanism according to claim 2, wherein said valley of said shaft tooth section has a first step region ~~(30)~~ raised toward said hub tooth section, and said peak of said hub tooth section has a second step region

retracted away from said shaft tooth section, and wherein a starting point ~~(P1)~~ of said first step region and a starting point ~~(P2)~~ of said second step region are set in respective positions which are offset from each other by a predetermined distance ~~(L4)~~.

4. **(Currently Amended)** A mechanism according to claim 3, wherein said first step region of said shaft tooth section has a tilt angle ~~(θ)~~ set to a value ranging from 5 degrees to 45 degrees.

5. **(Currently Amended)** A mechanism according to claim 1, wherein the varying radial tooth thickness of the crowned peak of said shaft tooth section comprises a maximum tooth thickness at a crowning top and progressively decreases in an axial direction from the crowning top toward opposite ends of the crowned peak of said shaft tooth section.~~different main load transmitting regions are provided depending on the magnitude of a load applied to an area where said shaft tooth section and said hub tooth section mesh with each other.~~

6. **(Currently Amended)** A mechanism according to claim 5, wherein said shaft tooth section and said hub tooth section mesh with each other in an area that is displaced ~~the magnitude of the load selectively represents a low load, a medium load, and a high load, and said main load transmitting regions (a, b, c) for transmitting the low load, the medium load, and the high load, respectively, are established successively~~ in a direction from **[[**a**]]** the crowning top ~~(P0)~~ of the crowned peak of said shaft tooth section toward said shaft shank as the magnitude of an applied load increases on the crowned peak.

7. **(Withdrawn - Previously Presented)** A mechanism according to claim

1, wherein said valley of said shaft tooth section has an arcuate region having a predetermined radius of curvature and extending toward said hub tooth section, and said peak of said hub tooth section has a step region facing said arcuate region and retracted away from said shaft tooth section.

8. **(Withdrawn - Previously Presented)** A mechanism according to claim 7, wherein a starting point (P1) of said arcuate region joined to the valley of said shaft tooth section and a starting point (P2) of said step region joined to the peak of said hub tooth section are set in respective positions which are offset from each other by a predetermined distance.

9. **(Withdrawn - Previously Presented)** A mechanism according to claim 1, wherein said valley of said shaft tooth section has a tapered region having a diameter progressively increasing toward said hub tooth section, and said peak of said hub tooth section has a step region facing said tapered region and retracted away from said shaft tooth section.

10. **(Withdrawn - Previously Presented)** A mechanism according to claim 9, wherein a starting point (P1) of said tapered region and a starting point (P2) of said step region are set in respective positions which are offset from each other by a predetermined distance.

11. **(Withdrawn - Previously Presented)** A mechanism according to claim 9, wherein said tapered region of said shaft tooth section has a rise angle (θ) set to a value ranging from 6 degrees to 65 degrees.

12. **(Withdrawn - Previously Presented)** A mechanism according to claim 1, wherein said peak of said hub tooth section has a tapered region having a diameter progressively increasing away from said shaft tooth section.

13. **(Withdrawn - Previously Presented)** A mechanism according to claim 1, wherein said peak of said hub tooth section has an arcuate region having a predetermined radius of curvature and retracted away from said shaft tooth section.

14. **(Withdrawn - Previously Presented)** A mechanism according to claim 1, wherein said peak of said shaft tooth section has an outside diameter which is constant in the axial direction of said shaft.

15. **(Previously Presented)** A mechanism according to claim 1, wherein said peak of said shaft tooth section has an outside diameter which varies in the axial direction of said shaft.

16. **(Previously Presented)** A mechanism according to claim 15, wherein said peak of said shaft tooth section has an outside diameter which gradually decreases toward said shaft shank.

17. **(Withdrawn - Previously Presented)** A mechanism for transmitting torque between a shaft and a hub disposed around the shaft while holding a shaft tooth section formed on the shaft and a hub tooth section formed on the hub in engagement with each other, wherein

said shaft tooth section has a crowned peak having a varying tooth thickness and a valley having an outside diameter varying from an end of the shaft toward a shaft

shank of the shaft; and

said hub tooth section is straight and has a constant tooth thickness, said hub tooth section having a peak and a valley which have a constant inside diameter in the axial direction of the shaft from the end toward said shaft shank.

18. **(Withdrawn - Previously Presented)** A mechanism according to claim 17, wherein different main load transmitting regions are provided depending on the magnitude of a load applied to an area where said shaft tooth section and said hub tooth section mesh with each other.

19. **(Withdrawn - Previously Presented)** A mechanism according to claim 18, wherein the magnitude of the load selectively represents a low load, a medium load, and a high load, and said main load transmitting regions (a, b, c) for transmitting the low load, the medium load, and the high load, respectively, are established successively in a direction from a crowning top (P0) of crowned peak toward said shaft shank.